

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Original) A system for detecting and transmitting test data from a housing (10) comprising a pressure chamber (11) that is filled with a high-pressure fluid and is homogeneously pressurized via printed conductors (21) connected to a sensing element (23) situated in the pressure chamber (11) and are guided out of the housing (10), a circuit board (12), both faces of which being subjected to the pressure prevailing in the pressure chamber (11) and at least one portion (30) of which extending out of the housing (10), being situated inside the pressure chamber (11) as a support for the strip conductors (21) and the housing (10) that encloses the pressure chamber (11) being separated in the plane of the circuit board and the faces of the housing halves (13, 14) clamping the circuit board (12) between them in such a way that radial forces exerted within the circuit board are absorbed when pressure is applied.

Claim 2 (Original) The system as recited in Claim 1, wherein the housing halves (13, 14) hold the circuit board (12) by a frictional connection.

Claim 3 (Original) The system as recited in Claim 1, wherein the housing halves (13, 14) hold the circuit board (12) by a positive connection.

Claim 4 (Previously presented) The system as recited in Claim 1, wherein the circuit board (12) is made from a hard plastic.

Claim 5 (Previously presented) The system as recited in Claim 1, wherein one housing half (14) encompasses opposite facing other housing half (13) externally via an

axially projecting flange (16), an external edge area of the circuit board (12) being in contact with an inside of the flange (16).

Claim 6 (Original) The system as recited in Claim 5, wherein the flange (16) has a cutout (17) extending across a limited circumferential portion, which is penetrated by a projection (30) extending outwardly from the circuit board (12).

Claim 7 (Previously presented) The system as recited in Claim 1, wherein seals (18) are situated between faces (15) of the housing halves (13, 14) which clamp the circuit board (12) and the surfaces of the circuit board (12).

Claim 8 (Previously presented) The system as recited in Claim 1, wherein the circuit board (12) has a recess (19) used to equalize pressure between sub-chambers (11a, 11b) of the pressure chamber (11) located on both sides of the circuit board.

Claim 9 (Previously presented) The system as recited in Claim 8, wherein the circuit board is designed to accommodate a position measuring system and a position pickup coil (23) being situated in the recess (19) and connected to the printed conductors (21) located on the circuit board (12), the position pickup coil (23) lying in the fluid located in the pressure chamber (11) surrounding a position pickup core (25) which is axially movable through the recess (19) of the circuit board (12) and the position pickup coil (25).

Claim 10 (Previously presented) The system as recited in Claim 9, wherein a wire winding (32) of the position pickup coil (23) which is located on a coil frame (31) is spray coated with a suitable material.

Claim 11 (Previously presented) The system as recited in Claim 10, wherein the spray coating (35) of the wire winding (32) includes connections of the wire winding (32) to printed conductors (21) extending in the circuit board (12).

Claim 12 (Previously presented) The system as recited in Claim 10, wherein the material of the spray coating (35) matches the material of the circuit board (12).

Claim 13 (Previously presented) The system as recited in Claim 1, wherein at least one sensor that detects a change of length of the circuit board (12) is situated on the circuit board (12).

Claim 14 (Original) The system as recited in Claim 13, wherein the sensor is a strain gauge.

Claim 15 (Original) The system as recited in Claim 13, wherein a sensor recording a change of the material thickness of the circuit board (12) is situated in the circuit board (12).

Claim 16 (Previously presented) The use of a system designed as recited in Claim 1 for detecting the longitudinal movements of a valve piston movable in hydraulic valves.

Claim 17 (Previously presented) The use of a system designed as recited in Claim 1 in an actuator for activating a valve used in hydraulics or compressed air technology having a coil frame movable through magnetic loading in a magnetic cylinder having a sequence of permanent magnets and pole discs in a magnetically conductive housing.